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side of a lower jaw retaining the symphysis ; from Chili Gulch, Calaveras Co., and was submitted to Dr. L.'s inspection by Prof. J. D. Whitney, who is in charge of the California State Survey. The specimen resembles, in its condition of preservation, the Mauvaises Terres fossils of White River, Nebraska. The formula of dentition is the same as in the Indian Rhinoceros, and the proportionate size of the teeth was the same. It was about the size of *R. occidentalis*, or perhaps a trifling degree larger, but its lateral incisors were triple the size. The estimated length of the jaw is about 16 inches. The space occupied by the molar series is 8 inches. Regarding the specimen as indicating a species distinct from any of the preceding, the name of *Rhinoceros hesperius* was proposed for it.

September 26th.

The President, Dr. Bridges, in the Chair.

Thirty-two members present.

On report of the respective Committees, the following papers were ordered to be published :

On a New Generic Type of SHARKS.

BY THEODORE GILL.

In the year 1858 the Smithsonian Institution received, from Capt. Stone, the jaws and vertebræ of an enormous species of shark existing in the Gulf of California and known to the inhabitants of the neighboring regions as the "Tiburon ballenas," or "whale shark." The specimen represented by the spoils was said to have been "twenty feet long," with a "head six feet wide," "pectorals three feet long" and "flukes six feet between tips." "The back from the head to first dorsal fin, brown with reddish spots." The head is represented as truncated in front.

The dried dentigerous band of the upper jaw is slightly curved forwards, about nineteen inches between the extremities, and somewhat more than an inch in width in front. The teeth are fixed and extremely minute, the largest being little more than a *line* in length, and decrease towards the ends of the jaw ; they are disposed in regularly transverse rows, of which there are over one hundred and sixty (164—167) on each side, while in front there are from thirteen to sixteen in each transverse row ; each tooth is recurved backwards and acutely pointed, swollen and with a heel-like projectio in front rising from its base.

This type will be seen, therefore, to be very distinct, but is evidently related to the South African genus *Rhinodon*, and must be referred to the family of Rhinodontidæ with the name of *Micristodus punctatus*.

On two species of DELPHINIDÆ, from California, in the Smithsonian Institution.

BY THEODORE GILL.

While examining the species of Cetaceans, represented by skulls and skins, in the Smithsonian Institution, I discovered two species of Delphinidæ supposed to have been hitherto undescribed. Brief descriptions of these are now submitted ; at another time, it is proposed to give more extended descriptions as well as figures.

LAGENORHYNCHUS OBLIQUIDENS, Gill.

The skull in its generic characters agrees with that of *L. leucopleurus*, the type of the genus. The beak is rather robust, its greatest width being contained about three times and a half in the length of the skull; thence it decreases gradually forwards, the lateral contour describing a sigmoid outline, while the surface above towards the end is moderately and quite regularly arched from side to side, no groove separating the intermaxillaries and supramaxillaries. The triangular or deltoid area, in front of the nostrils, is nearly plane but elevated, and its surface corrugated; it gradually ascends backwards to the posterior angles of the intermaxillaries, while forwards it is incurved, and continued as a narrow internal margin of the maxilliaries, almost to the anterior fourth of the beak; its greatest width is less than half the width of the cranium. The interspace between the intermaxillaries is wide, and scarcely contracted at the middle. The supraoccipital projects forwards, and its point almost or quite touches the nasals. The temporal fossæ project far backwards. The lower jaw is nearly uniformly high for the posterior fourth of its length, and at its symphisis is again enlarged and deeper.

The *teeth* are elongated, boldly curved, in the upper jaw about thirty-two in number; all are directed obliquely forwards and outwards; the distance between the last and the posterior notch of the supramaxillary equalling the width of the bone; in the lower jaw there are about thirty or thirty-one teeth on each side, directed somewhat outwards, and the posterior one also slightly backwards.

Three skulls of adults of this species, obtained at San Francisco, California, are in the Smithsonian collection. They indicate a species different from any that has yet been intelligibly described. I refer it to *Lagenorhynchus*, as contradistinguished from *Delphinus* by its flat palate, destitute of lateral grooves; the differences between skulls of this genus and *Cephalorhynchus* are not evident from the published accounts.

PHOCAENA VOMERINA, Gill.

The skull is very similar to that of *P. communis*, and the proportions generally differ little or none, but it is at once distinguished by the development of the vomerine bone, which is more developed and recurrent backwards, expanding below into a more or less enlarged horizontal process behind the palatines. The teeth appear also to be more numerous; in the upper jaw, on each side, there are about thirty-nine or forty teeth, disposed in two divaricating series, in the front of which are about eighteen, and in the posterior eleven. In other respects no decided specific differences seem to exist.

This species is represented in the collection of the Smithsonian Institution by the much injured skull of an animal obtained by Dr. Kennerly at Puget's Sound, and by the skin and skull of a younger animal, procured at San Francisco by Dr. William Stimpson as naturalist of the North acific Exploring Expedition.

Note on a Species of HUNCHBACK WHALE.

BY PROF. E. D. COPE.

The author has had an opportunity of studying the skeleton of a hunchbacked whale of our coast, preserved in the museum at Niagara Falls, in Canada. A label on the specimen explained that the animal was found dead at sea, forty miles from Petit Menan lighthouse, off the coast of Maine, and was towed to shore by a Capt. Taylor. It was carefully cleaned, and appeared to be perfect, except in the lack of the sternal, pelvic, and periotic elements. Its length, when fresh, was fifty feet.

It presents all the characters of the genus Megaptera, Gray, especially of the northern species, including the lack of coracoid process, and presence of a small coronoid process of the mandible. Its subordinate characters differ